

<i>Project Wild</i>		Alignment with MVC & Frederick County Essential Curriculum Grades 6-8 ⁱ			
Project Wild Activity	Page	Reading/ Language Arts	Social Studies	Science	Mathematics
<p>HABITAT LAP SIT – GRADE 5-8 STUDENTS WILL IDENTIFY THE COMPONENTS OF HABITAT; RECOGNIZE HOW HUMANS AND OTHER ANIMALS DEPEND UPON HABITAT; AND INTERPRET THE SIGNIFICANCE OF LOSS OR CHANGE IN HABITAT IN TERMS OF PEOPLE AND WILDLIFE. NOTE: THIS ACTIVITY INVOLVES PHYSICAL EDUCATION.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 SC.600.50.05 Analyze the impact of external and/or internal factors on system balance;</p> <p>SC.600.50.14 Predict & analyze how altering one part of an ecosystem often causes changes in other parts.</p> <p>SC.600.50.15 Discover that in a balanced ecosystem biotic & abiotic parts interact successfully to other parts;</p> <p>SC.600.70.08 Analyze how factors of one system can influence the size/stability of populations/substances within smaller or larger interacting systems.</p> <p>Grade 7 SC.700.50.04 Recognize that a functioning ecosystem is comprised of interacting biotic & abiotic factors;</p> <p>SC.700.50.10 Analyze sources of vulnerability & endangerment in cells, individuals, populations, & ecosystems;</p> <p>SC.700.50.13 Demonstrate how environmental conditions & disturbances influence population density, carry capacity, & biodiversity at the ecosystem & global level;</p> <p>SC.700.50.16 Analyze the sources of vulnerability that may lead to endangered and/or extinction.</p>	61	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (economic trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues)]</p>	<p>1.0 Skills & Processes: A. Constructing Knowledge; B. Applying Evidence and Reasoning</p> <p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms and species depend on physical conditions (resource competition; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a-d.</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. Compare how plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change is a result of environmental changes.</p> <p>6.0 Environmental Science: B. Environmental Issues</p>	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>OH DEER! – GRADES 5-8+</p> <p>STUDENTS WILL IDENTIFY AND DESCRIBE FOOD, WATER, AND SHELTER AS THREE ESSENTIAL COMPONENTS OF HABITAT; DESCRIBE THE IMPORTANCE OF GOOD HABITAT FOR ANIMALS; DEFINE “LIMITING FACTORS” AND GIVE EXAMPLES; AND RECOGNIZE THAT SOME FLUCTUATIONS IN WILDLIFE POPULATIONS ARE NATURAL AS ECOLOGICAL SYSTEMS UNDERGO CONSTANT CHANGE.</p> <p>NOTE: THIS ACTIVITY INVOLVES PHYSICAL SCIENCE.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM</p> <p>Grade 6 SC.600.50.05 Analyze impacts of external &/or internal factors on system balance; SC.600.50.13 Id./explain the interdependency of organisms in a given environment; SC.600.50.14 Predict & analyze how altering one part of an ecosystem often causes changes in other parts; SC.600.50.15 Discover that in a balanced ecosystem biotic & abiotic parts interact successfully; SC.600.70.08 Analyze how factors of one system can influence the size/stability of populations substances within smaller or larger interacting systems.</p> <p>Grade 7 SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability & endangerment in cells, individuals, populations, & ecosystems; SC.700.50.12 Identify/explain that interactions between organisms are a source of vulnerability; SC.700.50.13 Demonstrate how environmental conditions & disturbances influence population density, carry capacity, & biodiversity at the ecosystem & global level; SC.700.50.16 Analyze the sources of vulnerability that may lead to endangered &/or extinction; SC.700.50.19 Analyze how the vulnerability of a species may affect the biodiversity of an ecosystem; [potential exists to meet SC.700.50.14 Compare the meaning of vulnerability, threatened, endangered, & extinct.]</p> <p>Grade 8 SC.800.50.06 Relate growth/survival to the physical conditions of the environment.</p>	36	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (economic trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues)]</p>	<p>1.0 Skills & Processes: A. Constructing Knowledge B. Applying Evidence and Reasoning; C. Communicate Scientific Information.</p> <p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms and species depend on physical conditions (competition for resources; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a-d.</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. Compare how plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change is a result of environmental changes.</p> <p>6.0 Environmental Science: B. Environmental Issues</p>	<p>1.0 Knowledge of Algebra, Patterns & Functions: C. Numeric & Graphic Representations 1.b. Create a graph; 2. a. Identify & describe changes in a graph.</p> <p>4.0 Knowledge of Statistics: A. Data Displays (different graphs/plots per grade); B. Data Analysis.</p> <p>7.0 Processes of Math Relate or apply math to other disciplines & to life (a-d).</p>

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>HOW MANY BEARS CAN LIVE IN THE FOREST? – GRADES 5-8 STUDENTS WILL DEFINE A MAJOR COMPONENT OF HABITAT; AND IDENTIFY A LIMITING FACTOR. NOTE: THIS ACTIVITY INVOLVES PHYSICAL SCIENCE.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 SC.600.50.05 Analyze impacts of external &/or internal factors on system balance; SC.600.50.13 Id./explain the interdependency of organisms in a given environment; SC.600.50.14 Predict & analyze how altering one part of an ecosystem often causes changes in other parts; SC.600.50.15 Discover that in a balanced ecosystem biotic & abiotic parts interact successfully; SC.600.70.08 Analyze how factors of one system can influence the size/stability of populations substances within smaller or larger interacting systems.</p> <p>Grade 7 SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability & endangerment in cells, individuals, populations, & ecosystems; SC700.50.12 Identify/explain that interactions between organisms are a source of vulnerability; SC.700.50.13 Demonstrate how environmental conditions & disturbances influence population density, carry capacity, & biodiversity at the ecosystem & global level; SC.700.50.16 Analyze the sources of vulnerability that may lead to endangered &/or extinction; SC.700.50.19 Analyze how the vulnerability of a species may affect the biodiversity of an ecosystem; [potential exists to meet SC.700.50.14 Compare the meaning of vulnerability, threatened, endangered, & extinct.]</p> <p>Grade 8 SC.800.50.06 Relate growth/survival to the physical conditions of the environment.</p>	23	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	None	<p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth & survival of organisms & species depend on the physical conditions (selective breeding; resource competition; environmental changes). F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a. populations increase or decrease relative to availability of resources & environmental conditions; b. limiting factors; c. competition for resources; d. competition is reduced w/niches; Grade 7 3.0 Life Science: E. Flow of Matter & Energy. 1. How plants/animals meet their needs (cycles: water; nitrogen; matter); Grade 8 3.0 Life Science: D. Evolution 1. Recognize and describe that evolutionary change in species is a result of natural variation in organisms and environmental changes. (gradual & sudden; adaptations; extinction; species diversity).</p>	<p>6.0 Knowledge of Number Relationships & Computation: C. Number Computation: (add, subtract, multiply, divide, calculate percentage).</p> <p>7.0 Processes of Math Relate or apply math to other disciplines & to life (a-d).</p>

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>LEARNING TO LOOK, LOOKING TO SEE - GRADES K-8 STUDENTS WILL DESCRIBE DIFFERENCES SEEN IN AN ENVIRONMENT AS THE RESULT OF CASUAL AND DETAILED OBSERVATION; AND GIVE REASONS FOR THE IMPORTANCE OF LOOKING CLOSELY AT ANY ENVIRONMENT. NOTE: THIS ACTIVITY CAN INVOLVE ART.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 [potential exists to meet SC.600.50.15 In a balanced ecosystem biotic & abiotic parts interact successfully; SC.600.50.13 Id/Explain interdependency of organisms in a given environment.]</p> <p>Grade 7 [potential exists to meet SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.50.10 Id. sources of vulnerability & endangerment in individuals, populations, & ecosystems; SC.700.50.13 How environmental conditions & disturbances influence populations & biodiversity; SC.700.50.16 The sources of vulnerability that may lead to endangered &/or extinction].</p> <p>Grade 8 [potential exists to meet SC.800.50.06 Relate growth/survival to the physical conditions of the environment.]</p>	278	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p> <p>4.0 Writing: 2 (a) Compose oral, written, and visual presentations (drawing; journals;</p> <p>6.0 Listening: attend & respond to the speaker; asking questions; summarizing; following a set of directions.</p>	None	<p>1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning</p> <p>[potential exists to meet Grade 7 3.0 Life Science: A. Diversity of Life 1. Compile evidence to verify the claim of biologists that the features of organisms connect or differentiate them (external & internal features/behavioral pattern) - classification]</p>	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>HAZARDOUS LINKS, POSSIBLE SOLUTIONS (GRADES 7-8) STUDENTS GIVE EXAMPLES OF WAYS IN WHICH PESTICIDES ENTER FOOD CHAINS; DESCRIBE POSSIBLE CONSEQUENCES OF PESTICIDES, & DESCRIBE HOW REGULATIONS ATTEMPT TO CONTROL PESTICIDE USE. NOTE: THIS ACTIVITY INVOLVES ART.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 7 - SC.700.60.05 Model energy transfers using pyramids, interactions, food chains, food webs; SC.700.50.08 Energy transfer: photosynthesis, producer, consumer, decomposer, herbivore, carnivore, scavenger; SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability/ endangerment: individuals, populations, & ecosystems; SC700.50.12 Interactions between organisms are a source of vulnerability; SC.700.50.13 Environmental conditions & disturbances influence population density, carry capacity, biodiversity; SC.700.50.16 Sources of vulnerability lead to endangered &/or extinction; [potential: SC.700.50.14 Compare vulnerability, threatened, endangered, & extinction; SC.700.50.19 Species vulnerability affect biodiversity; SC.700.50.20 Biodiversity is essential to a balanced ecosystem.] Grade 8 – SC.800.50.06 Relate growth/survival to physical/environmental conditions; SC.700.70.16 Responsible use & conservation enables humans to maintain & extend natural resource productivity; [Potential: SC.800.50.05 Change over time through adaptation & natural selection].</p>	326	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs when using natural resources; consequences; land use issues; how govt. addresses env. issues.</p> <p>[w/Extension #2, potential exists to meet Grade 7 4.0 Economics A. Scarcity & Economic Decision-making 2. Sustainable devt; 4.c. How natural resources & pop. growth influence econ. devt; public health issues; B. Economic Systems & the Role of Government 2.d. Impacts of regulatory agencies (env. protection)].</p>	<p>Grade 7 3.0 Life Science. E. Flow of Matter and Energy. 1. How plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science. D. Evolution. 1. Evolutionary change in species is a result of natural variation in organisms and environmental changes (gradual & sudden environmental changes; adaptations; extinction; species diversity).</p> <p>6.0 Environmental Science A. Natural Resources and Human Needs B. Environmental Issues</p>	None
<p>STORMY WEATHER (GRADES 5-8) STUDENTS WILL GENERALIZE THAT HUMANS AND WILDLIFE SHARE ENVIRONMENTS AND EXPERIENCE SOME OF THE SAME NATURAL PHENOMENA. NOTE: INVOLVES MUSIC.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 - SC.600.50.05 Analyze impacts of external &/or internal factors on system balance. Grade 7 - SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability & endangerment in cells, individuals, populations, & ecosystems. Grade 8 - SC.800.50.06 Relate growth/survival to the physical conditions of the environment.</p>	85	<p>6.0 Listening: attend & respond to the speaker; asking questions; summarizing; following a set of directions.</p>	None	<p>[Note: good Engagement activity for: Grade 8 2.0 Earth & Space Science: E. Interactions of Hydrosphere & Atmosphere: 3. Id/describe atmospheric conditions related to weather systems: a. fronts; b. ID & describe atmospheric & hydrospheric conditions associated with severe weather].</p>	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
WHAT DID MY LUNCH COST WILDLIFE? – GRADES 5-8 STUDENTS WILL TRACE SOME FOODS FROM THEIR SOURCE TO THE CONSUMER; IDENTIFY IMPACTS FOODS AND THEIR PROCESSING HAVE ON WILDLIFE & THE ENVIRONMENT IN GENERAL; & RECOMMEND, WITH EXPLANATIONS, SOME FOOD HABITS THAT COULD BENEFIT THE ENVIRONMENT. FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 SC.600.50.04 Explain how inefficient use of resources & changes in natural systems will negatively impact the balance of systems & cycles. Grade 7 SC.700.50.12.a Acknowledge that human activities can produce positive or negative impacts on vulnerability. SC.700.70.16 Understand that responsible use and conservation technology enables humans to maintain & extend the productivity of natural resources; [potential exists to meet SC.700.70.01 Explain processes that produce renewable, nonrenewable, and perpetual resources and distinguish between the three.]	68	None	Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues; 4.0 Economics: A.1. (sustainable devt.); 4.c. (natural resource use & pop. growth impact econ. devt.	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning; C. Communicate Scientific Information 6.0 Environmental Science: A. Natural Resources & Human Needs; B. Environmental Issues	None
SATURDAY MORNING WILDLIFE WATCHING - GRADES 5-8 STUDENTS WILL DISCRIMINATE BETWEEN REALISTIC AND UNREALISTIC PORTRAYALS OF WILDLIFE AND OTHER ANIMALS IN CARTOONS; IDENTIFY POSSIBLE INFLUENCES ON PEOPLE FROM WATCHING CARTOONS; AND MAKE JUDGEMENTS ABOUT APPROPRIATE AND INAPPROPRIATE BEHAVIORS THEY THINK CAN RESULT FROM CARTOON WATCHING. THIS ACTIVITY DOES NOT CORRELATE WITH GRADE 6-8 FREDERICK COUNTY ESSENTIAL CURRICULUM (SCIENCE).	184	[Evaluation: Write a Story 4.0 Writing: 1. Compose to express personal ideas, inform, and persuade; 4. ID how language choices affect thoughts and feelings; 5. Assess the effectiveness of details, word choice, syntax, use of figurative language, and rhetorical devices in the student's own composing].	None	1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning With OPTIONAL component only: Grade 7 3.0 Life Science: A. Diversity of Life 1. Classification (external & internal features; behavioral patterns).	None

Project Wild Activity	Page	Reading/English Language Arts	Social Studies	Science	Mathematics
<p>QUICK FROZEN CRITTERS - GRADES 5-8 STUDENTS WILL DISCUSS PREDATOR/PREY RELATIONSHIPS, INCLUDING ADAPTATIONS; DESCRIBE THE IMPORTANCE OF ADAPTATIONS IN PREDATOR/PREY RELATIONSHIPS; AND RECOGNIZE THAT LIMITING FACTORS – INCLUDING PREDATOR/PREY RELATIONSHIPS—AFFECT WILDLIFE POPULATIONS. NOTE: THIS ACTIVITY INVOLVES PHYSICAL SCIENCE.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 SC.600.50.05 Analyze impacts of external &/or internal factors on system balance; SC.600.50.13 Id./explain the interdependency of organisms in a given environment; SC.600.50.14 Predict & analyze how altering one part of an ecosystem often causes changes in other parts; SC.600.50.15 Discover that in a balanced ecosystem biotic & abiotic parts interact successfully; SC.600.70.08 Analyze how factors of one system can influence the size/stability of populations substances within smaller or larger interacting systems.</p> <p>Grade 7 SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability & endangerment in cells, individuals, populations, & ecosystems; SC700.50.12 Identify/explain that interactions between organisms are a source of vulnerability; SC.700.50.13 Demonstrate how environmental conditions & disturbances influence population density, carry capacity, & biodiversity at the ecosystem & global level; SC.700.50.16 Analyze the sources of vulnerability that may lead to endangered &/or extinction; SC.700.50.19 Analyze how the vulnerability of a species may affect the biodiversity of an ecosystem; [potential exists to meet SC.700.50.14 Compare the meaning of vulnerability, threatened, endangered, & extinct.]</p> <p>Grade 8 SC.800.50.06 Relate growth/survival to the physical conditions of the environment.</p>	122	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p> <p>[Evaluation #4: Write about a predator: 4.0 Writing: 2. Compose to express personal ideas, inform, and persuade; 4. ID how language choices affect thoughts and feelings; 5. Assess the effectiveness of details, word choice, syntax, use of figurative language, and rhetorical devices in the student's own composing].</p>	None	<p>1.0 Skills & Processes A. Constructing Knowledge; B. Applying Evidence and Reasoning</p> <p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms/species depend on physical conditions (competition for resources; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on physical conditions/available resources.</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. How plants / animals meet their needs.</p> <p>Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change in species is a result of natural variation in organisms & environmental changes.</p>	None

Project Wild-Aquatic

Alignment with VSC & Frederick County Essential Curriculum Grades 6-8ⁱ

<p>WETLAND METAPHORS GRADES 5-8 STUDENTS WILL DESCRIBE THE CHARACTERISTICS OF WETLANDS, AND EVALUATE THE IMPORTANCE OF WETLANDS TO WILDLIFE AND HUMANS.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM Grade 6 SC.600.50.15 In a balanced ecosystem biotic & abiotic parts interact successfully to maintain balance; SC.600.60.13 Explain how consumers in a food chain depend on the chemical energy provided by producers for survival; SC.600.70.08 Analyze how factors of one system can influence the size/stability of populations/substances within small or larger interacting systems. [potential exists to meet SC.600.50.02 Analyze how human activities can accelerate or magnify many naturally occurring changes in water quality; SC.600.60.10 Trace the cycling of materials/energy in an ecosystem; SC.600.60.11 Explain how matter is transformed between the physical environment and organisms and the total amount of matter remains the same; SC.600.60.12 Explain that energy entering the ecosystem as sunlight is transferred by producers into chemical energy through photosynthesis]</p> <p>Grade 7 SC.700.50.04 Recognize that a functioning ecosystem is comprised of interacting biotic and abiotic factors. [potential exists to meet SC.700.08 Relate the following terms to energy transfer: photosynthesis, producer, consumer, decomposer, herbivore, carnivore, omnivore, and scavenger].</p> <p>Grade 8 SC.800.50.01 Identify examples of variation in natural systems.</p>	39	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>[potential exists to meet Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues)].</p>	<p>Grade 6 3.0 Life Science: F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available.</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. How plants and animals meet their needs.</p> <p>6.0 Environmental Science A. Natural Resources and Human Needs B. Environmental Issues</p> <p>[potential exists to meet Grade 8 3.0 Life Science: E. Interactions of Hydrosphere and Atmosphere: 1. a. water cycle; b. distribution & circulation of water on Earth's surfaces; c. physical properties of fresh & salt water; d. functions of the layers of the atmosphere.]</p>	None
---	----	---	--	--	------

Project Wild-Aquatic Activity (cont'd)	Page	Reading/ Language Arts	Social Studies	Science	Mathematics
<p>MIGRATION HEADACHE (GRADES 5-8) STUDENTS WILL LIST LIMITING FACTORS AFFECTING HABITATS AND POPULATIONS OF MIGRATING WATER BIRDS, PREDICT/ DESCRIBE THE EFFECTS OF LIMITING FACTORS, HABITAT LOSS & DEGRADATION ON POPULATIONS OF MIGRATING WATER BIRDS, AND MAKE INFERENCES ABOUT THE IMPORTANCE OF SUITABLE HABITAT FOR MIGRATING WATER BIRDS. NOTE: INVOLVES PHYSICAL SCIENCE.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM</p> <p>Grade 6 - SC.600.50.02 Human activities can accelerate/magnify naturally occurring changes in water quality; SC.600.50.04 Inefficient use & changes in natural systems negatively impact the balance of systems & cycles; SC.600.50.05 Impacts of external &/or internal factors on system balance; SC.600.50.13 Interdependency of organisms in a given environment; SC.600.50.14 Altering one part of an ecosystem often causes changes in other parts; SC.600.50.15 In a balanced ecosystem biotic & abiotic parts interact successfully; SC.600.70.08 Factors of one system influence the size/stability of populations within smaller or larger interacting systems.</p> <p>Grade 7 - SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.09 All organisms have basic characteristics & survival needs; SC.700.50.10 Sources of vulnerability & endangerment in individuals, populations, & ecosystems; SC700.50.12 Interactions between organisms are a source of vulnerability; SC.700.50.13 Environmental conditions & disturbances influence population density, carry capacity, & biodiversity; SC.700.50.16 Sources of vulnerability that may lead to endangered &/or extinction; SC.700.50.19 Vulnerability of a species may affect the biodiversity of an ecosystem; SC.700.70.16 Responsible use & conservation enables humans to maintain & extend the productivity of natural resources; [potential: SC.700.50.14 Vulnerability, threatened, endangered, & extinct; SC.700.50.20 Why biodiversity is essential to a balanced ecosystem].</p> <p>Grade 8 - SC.800.50.06 Relate growth/survival to the physical conditions of the environment.</p>	15	<p>1.0 General Reading Processes: Vocabulary D. Vocabulary. Develop and apply vocabulary.</p>	<p>Grade 7 3.0 Geography: D. Modifying & Adapting the Environment (trade offs & consequences when using natural resources; land use issues; how govt. addresses env. issues.</p>	<p>1.0 Skills & Processes: A. Constructing Knowledge B. Applying Evidence and Reasoning; C. Communicate Scientific Info.</p> <p>Grade 6 3.0 Life Science: D. Evolution. 1. The growth and survival of organisms and species depend on physical conditions (competition for resources; environmental changes); F. Ecology. 1. The number of organisms an environment can support depends on the physical conditions and resources available: a. populations increase/decrease relative to available resources & environmental conditions; b. limiting factors; c. resource competition; d. competition is reduced w/niches;</p> <p>Grade 7 3.0 Life Science: E. Flow of Matter and Energy. 1. Compare how plants & animals meet their needs.</p> <p>Grade 8 3.0 Life Science: D. Evolution. 1. Evolutionary change is a result of environmental changes (gradual & sudden; adaptations; extinction; species diversity).</p> <p>6.0 Environmental Science: B. Environmental Issues</p>	None

Project Wild-Aquatic Activity	Page	Reading/ Language Arts	Social Studies	Science	Mathematics
<p>FASHION A FISH (K-4+) STUDENTS WILL DESCRIBE ADAPTATIONS OF FISH TO THEIR ENVIRONMENT, HOW ADAPTATIONS HELP FISH SURVIVE IN THEIR HABITATS, AND INTERPRET THE IMPORTANCE OF ADAPTATIONS IN ANIMALS. NOTE: THIS ACTIVITY INVOLVES ART.</p> <p>FREDERICK COUNTY ESSENTIAL CURRICULUM</p> <p>Grade 6 - SC.600.50.13 Interdependency of organisms & environment; SC.600.50.15 In a balanced ecosystem biotic & abiotic parts interact; SC.600.60.13 Consumers depend on energy from producers [potential: SC.600.70.08 Factors of one system influence size/ stability of populations /substances w/in smaller or larger interacting systems].</p> <p>Grade 7 - SC.700.50.04 A functioning ecosystem is comprised of interacting biotic & abiotic factors; SC.700.50.05 Adaptations to a particular habitat account for unique variations & influence distribution of life forms; SC.700.09 Organisms have basic characteristics & survival needs; SC.700.50.11 Individual organisms capable of adapting to environmental changes are more likely to survive & have offspring; [potential: SC.700.50.08 Energy transfer terms: photosynthesis, producer, consumer, decomposer, herbivore, carnivore, omnivore, & scavenger; SC.700.50.10 Vulnerability & endangerment in individuals, populations, & ecosystems; SC.700.50.12 Interactions between organisms are a source of vulnerability; SC.700.50.13 Environmental conditions & disturbances influence population density, carry capacity, & biodiversity; SC.700.50.16 Vulnerability may lead to endangered &/or extinction; SC.700.50.19 Species vulnerability affect biodiversity; SC.700.50.14 Vulnerability, threatened, endangered, & extinct; SC.700.50.20 Why biodiversity is essential to a balanced ecosystem].</p> <p>Grade 8 - SC.800.50.01 Examples of variation in natural systems; SC.800.50.05 Change over time through adaptation & natural selection; SC.800.50.06 Growth/survival related to physical environmental conditions; [potential: SC.800.50.07 Traits are inherited or result from environmental interactions; SC.800.50.08 Evolution is the gradual change in species over time].</p>	56	<p>1.0 General Reading Processes: Vocabulary</p> <p>D. Vocabulary. Develop and apply vocabulary.</p>	None	<p>1.0 Skills & Processes</p> <p>A. Constructing Knowledge;</p> <p>B. Applying Evidence and Reasoning; C. Communicate Scientific Information.</p> <p>Grade 6</p> <p>3.0 Life Science: D. Evolution: 1. The growth & survival of organisms & species depend on physical conditions (resource competition; environmental changes; fossils); F. Ecology: 1. The number of organisms an environment can support depends on physical conditions & resources available: a-d.</p> <p>Grade 7</p> <p>3.0 Life Science: A. Diversity of Life: 1. Features of organisms connect or differentiate them (external & internal features/behavioral pattern)</p> <p>E. Flow of Matter and Energy: 1. Plants and animals obtain & use food.</p> <p>Grade 8</p> <p>3.0 Life Science: D. Evolution: 1. Evolutionary change in species is a result of natural variation in organisms & environment-al changes (gradual & sudden environmental changes; adaptations; extinction; species diversity).</p>	None

ⁱ Activities meet standards as noted. When a standard is listed without notation, the activity meets the standard fully for all applicable grades for that activity.